

Maine Weekly Influenza Surveillance Report

July 10, 2009

Synopsis

During the weeks ending June 27th, 2009 (MMWR week 25)* and July 7th, 2009 (MMWR week 26), Maine reported widespread influenza activity.

H1N1 (Swine Influenza)

As of July 10th, 2009, Maine had 203 confirmed and probable cases of H1N1 (swine) influenza diagnosed in the state, 114 in Maine residents and 89 in out of state residents. For the most up to date information on swine influenza, please see our website at

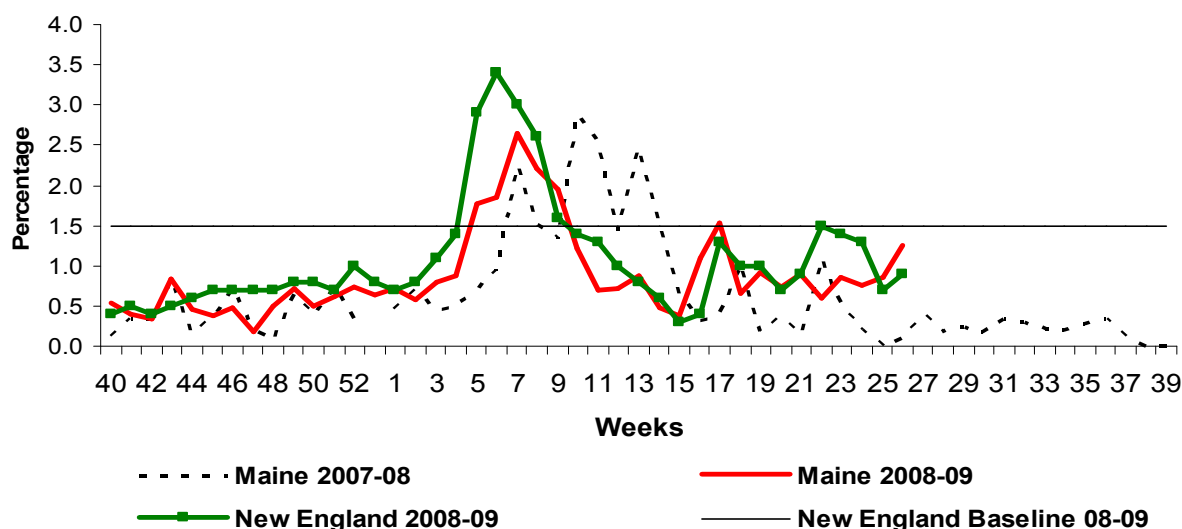
<http://www.maine.gov/dhhs/boh/swine-flu-2009.shtml>

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending June 27th, 2009, 0.9% of outpatient visits reported by eight Maine Sentinel Providers were for influenza-like illness (ILI). During the week ending July 4th, 2009, 1.3% of outpatient visits reported by six Maine Sentinel Providers were for ILI. ILI is defined as fever ($\geq 100^{\circ}\text{F}$ / $\geq 37.8^{\circ}\text{C}$) AND cough or sore throat in the absence of a known cause. In the New England States, 0.7% and 0.9% of outpatient visits were attributed to influenza-like illness during week 25 and week 26 respectively.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

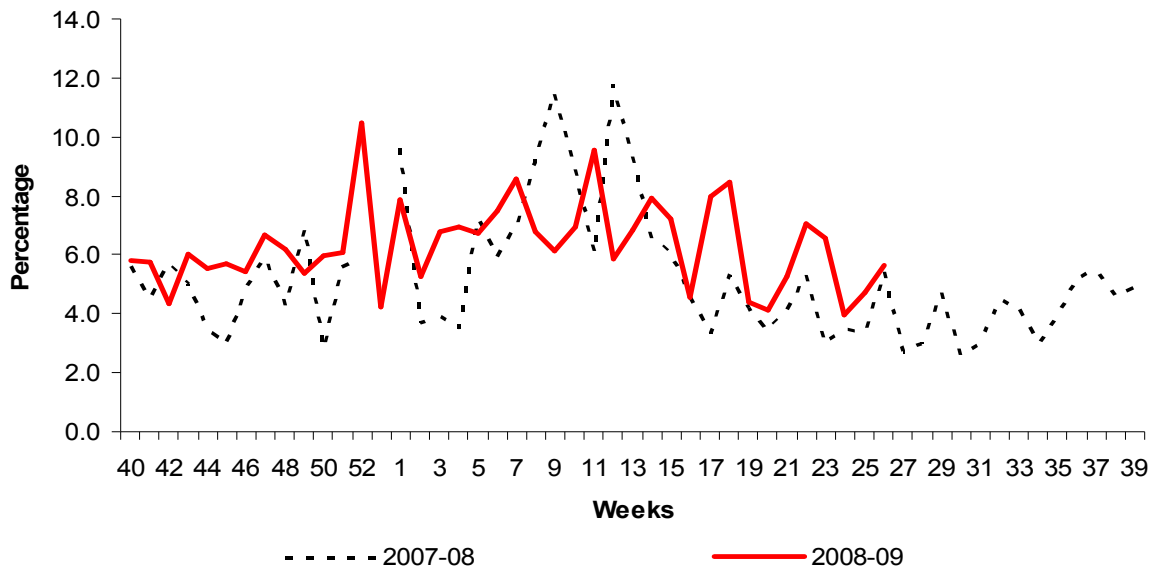
* At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending June 27th, 2009, 4.7% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza. During the week ending July 4th, 2009, 5.6% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09



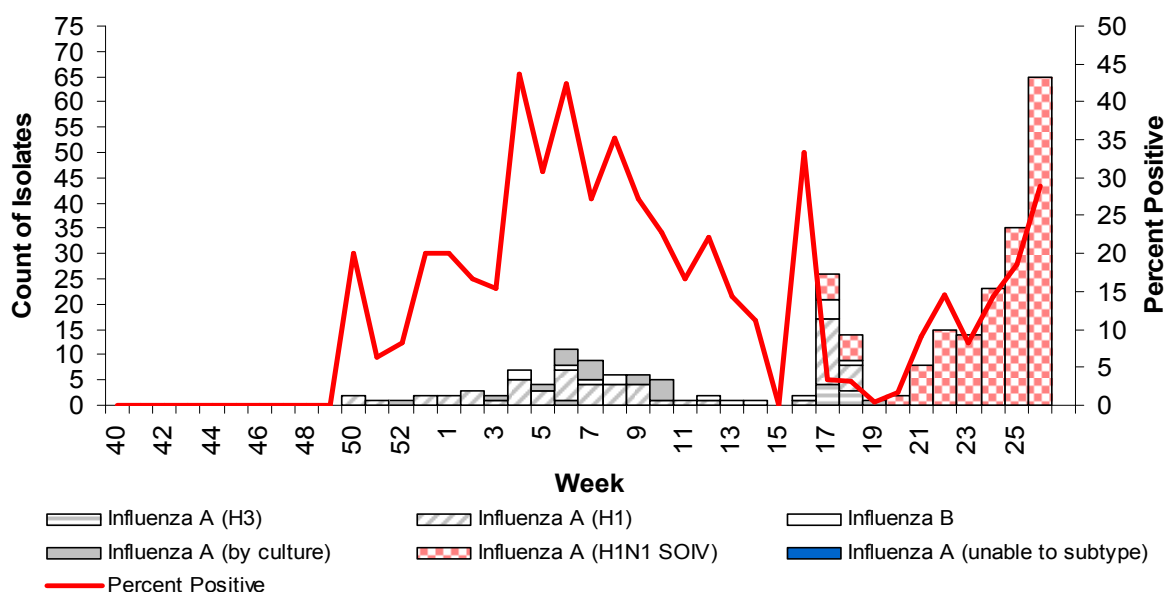
Laboratory Reporting

During the week ending June 27th, 2009, 200 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Thirty-five tested positive for influenza A H1N1 Swine Origin Influenza Virus (SOIV), and two tested positive for influenza A H3. During the week ending July 4th, 2009, 225 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Fifty five tested positive for influenza A H1N1 Swine Origin Influenza Virus (SOIV).

To date, 2,830 samples have been submitted, 276 (9.8%) were positive for influenza: 59 for influenza A H1 (seasonal), 15 for influenza A H3, 15 for influenza A (by culture), 172 for influenza A H1N1 SOIV, and 15 for influenza B.

Several of the influenza A H1N1 SOIV patients are not residents of Maine. They did test positive in the state, but are not counted in our confirmed state numbers.

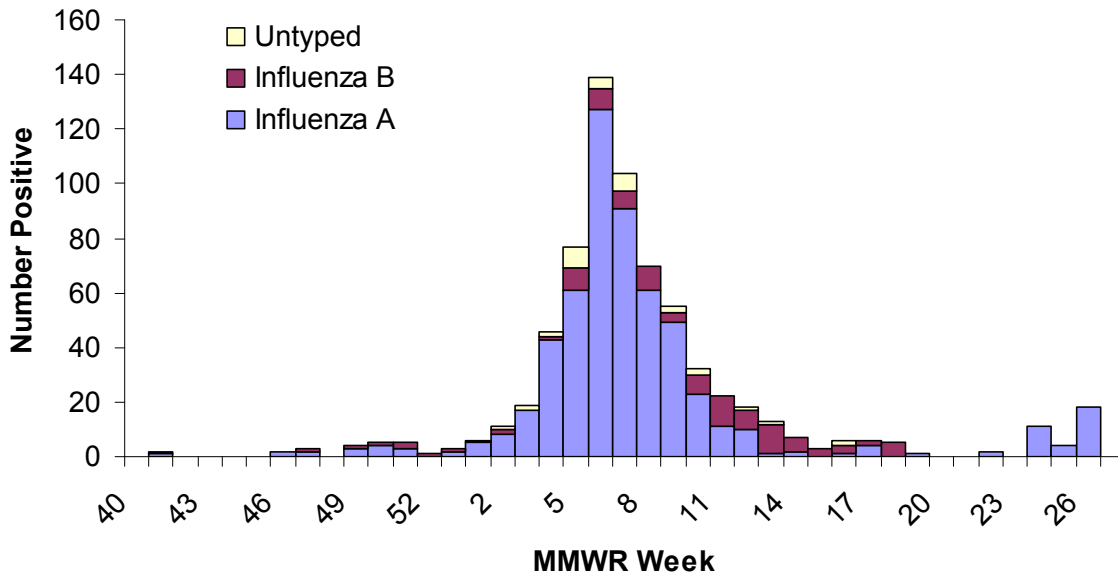
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians' offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending June 27th, 2009, 4 rapid positive tests were reported, all positive for influenza A. During the week ending July 4th, 2009, 18 rapid positive tests were reported, all positive for influenza A. A combined total of 700 positive rapid tests have been reported this season. A total of 567 were positive for influenza A, 101 were positive for influenza B, and 32 were not typed.

Positive Rapid Influenza Tests, Maine, 2008-2009



Outbreaks

During the week ending June 27th, 2009, one new outbreak of influenza-like illness was reported in a camp. During the week ending July 4th, 2009, five new outbreaks of influenza-like illness were reported, all in camps. To date, 42 outbreaks of influenza-like illness have been reported; 18 in long term care facilities, one in an acute care facility, one in a congregate living facility, seven in a camp and 15 in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

	Facility Type*	District	Date Reported	Attack Rate (%)		Hospitalizations #	Deaths #	Vaccination rate (%)		Lab-confirmed
				Student/Resident	Staff			Student/Resident	Staff	
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A
3	LTC	Western	1/26/2009	2	0	1	0	99	50	Influenza A
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A
5	School	York	2/2/2009	26	2	^	^	^	^	Influenza A
6	School	Penquis	2/4/2009	1	0	1	^	^	^	Influenza A
7	School	Mid Coast	2/9/2009	26	13	^	^	^	^	No
8	School	Mid Coast	2/9/2009	27	14	^	^	^	^	No
9	LTC	York	2/10/2009	3	0	1	0	95	40	Influenza A
10	School	Downeast	2/10/2009	4	^	^	^	^	^	Influenza A
11	School	Mid Coast	2/10/2009	19	0	^	^	^	^	Influenza A & B
12	School	Mid Coast	2/2/2009	23	5	^	^	^	^	Influenza A
13	LTC	Mid Coast	2/10/2009	5	^	^	^	^	^	Influenza A

14	School	Mid Coast	2/10/2009	46	4	^	^	^	^	Influenza A
15	School	York	2/11/2009	15	15	^	^	^	^	^
16	School	York	2/11/2009	15	^	^	^	^	^	Influenza B
17	School	Western	2/13/2009	39	^	^	^	^	^	Influenza A
18	LTC	Mid Coast	2/17/2009	14	24	0	2	96	20	Influenza A
19	LTC	Western	2/19/2009	2	0	0	0	^	^	Influenza A
20	School	Central	2/23/2009	2	^	^	^	^	^	Influenza A & B
21	LTC	Western	2/23/2009	8	0	2	0	95	40	Influenza A
22	School	Western	2/25/2009	15	5	^	^	50	^	Influenza B
23	LTC	Western	2/25/2009	8	0	0	0	^	^	Influenza A
24	LTC	Central	2/26/2009	46	22	0	0	100	32	Influenza B
25	LTC	Cumberland	2/26/2009	2	0	1	0	96	46	Influenza A
26	LTC	Central	3/3/2009	53	12	3	0	93	68	Influenza A
27	LTC	Aroostook	3/3/2009	17	^	1	0	^	^	Influenza A (H1)
28	LTC	Aroostook	3/3/2009	13	1	0	0	95	^	Influenza A
29	LTC	Western	3/6/2009	^	^	0	^	100	^	Influenza A
30	School	Mid Coast	3/24/2009	30	0	^	^	^	^	Influenza A & B
31	LTC	Downeast	4/21/2009	26	15	2	0	100	98	No
32	LTC	Western	4/20/2009	11	0	1	^	~67	^	Influenza A
33	Acute	Central	4/29/2009	^	^	0	0	^	^	Influenza A
34	Other	Cumberland	6/5/2009	^	^	^	^	^	^	H1N1
35	Camp	York	6/10/2009	^	^	^	^	^	^	H1N1
36	School	Western	6/16/2009	^	^	^	^	^	^	H1N1
37	Camp	Cumberland	6/22/2009	^	^	^	^	^	^	H1N1
38	Camp	Central	6/29/2009	^	^	^	^	^	^	H1N1
39	Camp	Central	7/2/2009	^	^	^	^	^	^	H1N1
40	Camp	Central	7/2/2009	^	^	^	^	^	^	H1N1
41	Camp	Western	7/2/2009	^	^	^	^	^	^	H1N1
42	Camp	Cumberland	7/1/2009	^	^	^	^	^	^	H1N1

* Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥ 3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥ 1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥ 1 patients with ILI or lab-confirmed influenza with symptom onset ≥ 48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as $\geq 15\%$ absentee rate among student population due to ILI or lab-confirmed influenza.

^ Data unavailable

NA indicates not applicable

**Maine DHHS Districts:

York District: York county

Cumberland District: Cumberland county

Western District: Franklin, Oxford, and Androscoggin counties

Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties

Central District: Somerset and Kennebec counties

Penquis District: Piscataquis and Penobscot counties

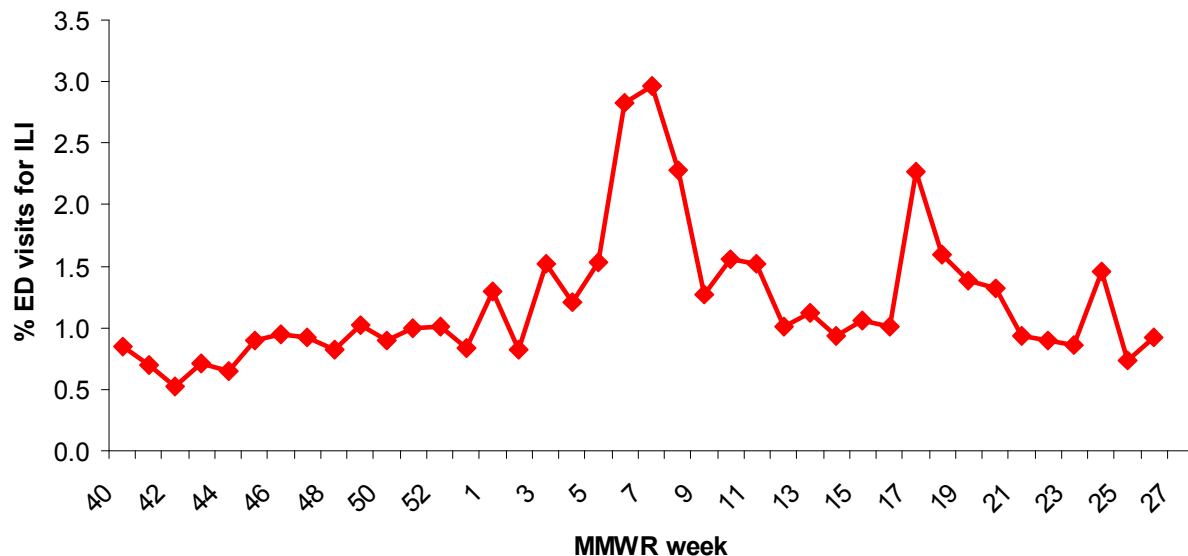
Downeast District: Washington and Hancock counties

Aroostook District: Aroostook county

Syndromic Surveillance

0.7% of visits to emergency departments at eight of Maine's hospitals were characterized as influenza-like illness during week 25, based on the patients' chief complaint. During week 26 0.9% of visits to emergency departments were characterized as influenza-like illness.

Emergency Department Visits for ILI at Seven Hospitals – Maine, 2008-09

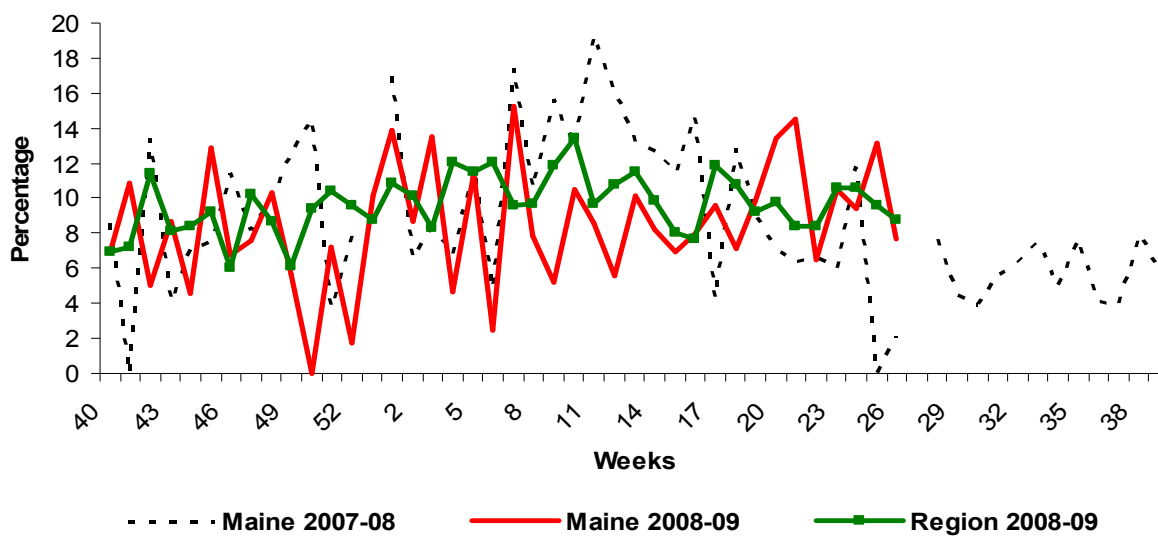


Fatalities Surveillance

Death Certificates

During the week ending June 27th, 2009, 13.1% of deaths reported by three city vital records offices were attributable to pneumonia and influenza. During the week ending July 4th, 2009, 7.7% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

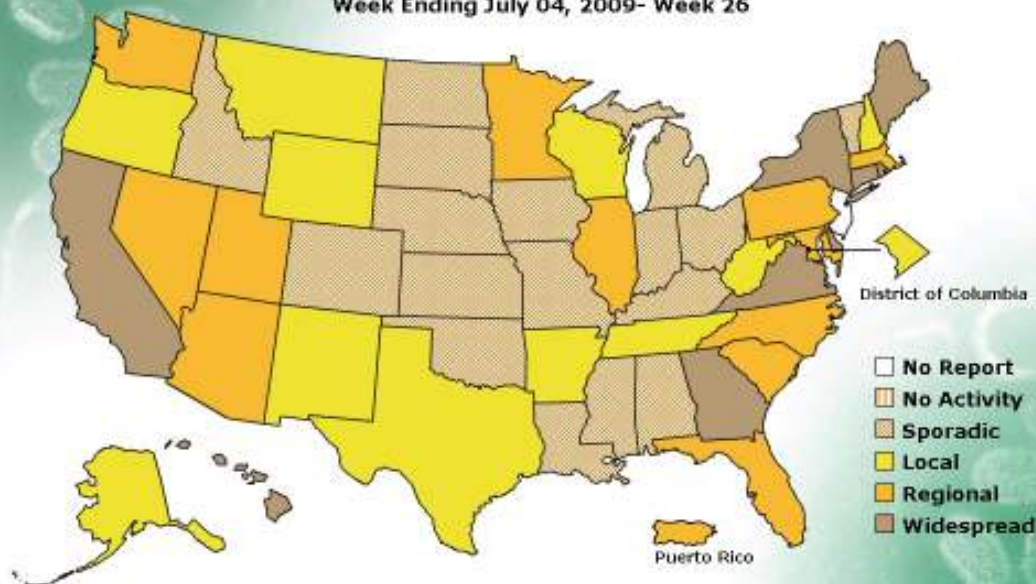
National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported widespread activity for both weeks ending June 20th, and July 4th, 2009 (week 25 and week 26).

FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
Week Ending July 04, 2009- Week 26



*This map indicates geographic spread and does not measure the severity of influenza activity.